

REMARKS

In the Office Action, the Examiner indicated that claims 1-6, 8-11 and 13-33 are pending in the application. The Examiner rejected all claims.

Claim Rejections

In item 2 of the Office Action, the Examiner rejected claims 11, 13, 15-18, 20, 21, 29-31 and 33 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2001/0033554 to Ayyagari et al. in view of U.S. Patent No. 6,546,091 to Wehmeyer et al. ("Wehmeyer").

In item 4 on pages 5 to 9 of the Office Action, the Examiner rejected claims 1-6, 8-10, 19, 22-27, 28 and 32 under 35 U.S.C. §103(a) as being unpatentable over Ayyagari et al. in view of Wehmeyer, and further in view of U.S. Patent No. 5,815,682 to Williams et al.

The Present Invention

The present invention provides a method and system for providing an accurate service record from one communication device to another communication device. More particularly, the present invention is a method and system by which a determination is made as to whether or not a second communication device has a modem present and whether or not a proper phone line connection exists in the second device (e.g., so that the modem can be utilized). The second

communication device generates a service record identifying modem-based services that it can offer based on whether or not a modem having access to a telephone line is present, i.e., the service will be identified in the service record only if the proper connection to the telephone line is available.

The communication devices which can use this technology include laptops, desktops, hand-helds, PDAs, mobile phones, two-way pagers, etc. (specification, page 1, lines 11-13). Thus, for example, a first communication device comprising a PDA can retrieve the service record from a second communication device, e.g., a desktop computer. Since the desktop computer (in this example) produces its service record based upon first determining whether or not a modem is present and whether or not a proper phone line connection exists to utilize that modem, the service record provided to the PDA will inform a user of the PDA if modem-based services are available, and likewise, will exclude modem-based services from the service record if no modem and proper phone line connection exists.

U.S. Patent Publication No. 2001/0033554 to Ayyagari et al.

U.S. Patent Publication No. 2001/0033554 to Ayyagari et al. teaches a proxy-bridge device comprising a bridge for sending packets to and from (between) an external device and a device in a piconet. The protocol stack of the proxy-bridge device allows an application to communicate with a remote device, e.g., via the Internet protocol. Thus, the proxy-bridge device,

using two protocols, enables remote users to discover the presence of a service offered by a device in a piconet as a logical embedded device within the proxy-bridge device and vice-versa. The Examiner acknowledges that Ayyagari fails to disclose steps/means for determining whether a proper phone line connection exists in a second communication device, as well as failing to determine whether a modem is present in the second communication device.

U.S. Patent No. 6,546,091 to Wehmeyer et al.

U.S. Patent No. 6,546,091 to Wehmeyer et al. (Wehmeyer) teaches a method and apparatus for automatically establishing a data connection to a phone line. Wehmeyer includes a telephone line interface circuit coupled to a subscriber telephone line, and a modulator and demodulator circuit coupled to the telephone line interface circuit. A control circuit conditions the apparatus to establish a connection to the subscriber telephone line and comprises circuitry to determine whether a central office to which the subscriber telephone line is connected is a tone-dial central office or a pulse-dial-only central office, whether a dialing prefix is necessary to access the subscriber telephone line, and whether the call waiting feature is activated on the subscriber telephone line. The Examiner relies upon Wehmeyer for an asserted disclosure of determining whether a proper phone line connection between a network and a modem exists and reporting the status of the connection.

U.S. Patent No. 5,815,682 to Williams et al.

U.S. Patent No. 5,815,682 to Williams et al. ("Williams") teaches a device-independent modem interface employing a call control and data transfer application programming interface which allows application programs to access a modem in a device-independent fashion. The Examiner relies upon Williams et al. for an asserted disclosure of a step/means of determining whether particular modems for particular applications are present in the communication system.

The Examiner Has Not Established a *Prima Facie* Case of Obviousness

As set forth in the MPEP:

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skilled in the art, to modify the reference or to combine reference teachings.

MPEP 2143

In the outstanding non-final Office Action, the Examiner replaced teaching reference Wang (from the non-final Office Action dated August 10, 2005), with new teaching reference Wehmeyer. With the exception of additional background information on Ayyagari, and the addition of Wehmeyer, the rejections remain essentially identical.

For simplicity, the addition of Wehmeyer will be addressed first. Then, restated arguments from Applicant's response filed November 10, 2005 will be included, with additional comments regarding the addition of Wehmeyer.

The Examiner acknowledges that Ayyagari lacks steps/means for determining whether a proper phone line connection exists in a second communication device before sending out a service advertisement, as well as lacks determining whether a modem is present in the second communication device. Specifically, the Examiner looks to Wehmeyer to teach determining whether a proper phone line connection between a network and a modem exists, and then reporting the status of the connection in a service advertisement. Additionally, the Examiner looks to Wehmeyer for motivation to modify Ayyagari to include the above limitation.

Wehmeyer teaches automatic detection of phone system settings for dial-up modem connections. This system utilizes a circuit for detecting whether a phone line is present. However, the presence of an active phone line is not recorded in a service advertisement. Specifically:

“If the set top box modem 1 is not properly connected to the telephone line, or if the telephone line is already in use, the subscriber is notified of the problem so that either a proper connection of the set top box modem 1 to the telephone line can be made or the use of the telephone line is ended, as the case may be. Then the call is tried again at a later time.” (Col 4 lines 29-35)

Applicant acknowledges the existence of telephone line detection circuits, and does not claim a telephone line detection circuit as its invention. Rather, Applicant claims, in a communication system involving at least two discrete communication devices, a system whereby a device having modem services potentially available does not “advertise” their availability unless the modem contained in this device is connected to a functioning telephone line. Wehmeyer provides no

teaching of testing a modem for a phone line connection prior to advertising services from a first device to a requesting device as Wehmeyer is unconcerned with service advertisements. Wehmeyer also fails to provide any motivation for combining a circuit that detects a functioning phone line with the system of Ayyagari to result in a system where a first device tests its modem and phone line connection before making a service advertisement.

Additionally, as has been previously addressed, Ayyagari fails to disclose determining modem capabilities before sending out a service advertisement. The only functionality tests Ayyagari discloses (which lack a modem connectivity test) occur after service advertisements are sent. As Wehmeyer fails to teach or provide motivation for service advertisements based on first testing for modem availability, a combination of Ayyagari in view of Wehmeyer will not result in the claimed invention, specifically a system that tests for modem connectivity in a first device before sending a service advertisement to a second device.

Here, for the Examiner's convenience, are previously present arguments with respect to the application of Ayyagari and Williams, with added arguments regarding the addition of Wehmeyer.

As noted above, the present claimed invention is utilized in an environment in which there are at least two disparate communication devices (e.g., a PDA and a desktop computer; two laptops; etc.), where a first of the devices wishes to utilize services, e.g., modem services, provided by the second device, such as a PDA utilizing a personal computer to access the Internet.

Claim 1 states:

“first determining whether a modem is present in the second communication device;

second determining whether a proper phone line connection exists in the second communication device; and

generating, by the second communication device, a service record identifying modem-based services that can be offered by the second communication device to the first communication device, based on the results of the first and second determining steps”

Each additional independent claim (claims 11, 16, 22, 29) states these limitations as well.

To avoid the time-wasting process of having the first device communicate with the second device, identify that the second device has a modem installed, and then find that the installed modem does not have a proper telephone line connection, the present invention has the second device make a determination that a proper phone line connection exists before it represents to other communication devices that it has modem services available. As seen in the quoted text from Claim 1, tests are done to insure a functioning modem is properly connected to a phone line before any generation of a listing of available services is performed. If a proper phone line connection, that is, one that is properly connected to a functioning telephone line, does not exist, then the modem in the second device will not even be shown to a user of the first device as being available; from the perspective of the first device, it will look as though no modem exists in the second device.

Ayyagari et al. contains no such teachings or suggestion. Nowhere in Ayyagari is there any teaching or suggestion of the selective “advertising” of modem services by a second

communication device to a first communication device only after determining that such modem services, via a properly functioning telephone line, are available. Ayyagari merely describes a typical multiple-device communication system, such as a BlueTooth system, which Applicant acknowledges is well known. In the system of Ayyagari, best illustrated in Figure 8, the system begins with a device polling another device to discover the offered services (step 800). If the computer receiving a polling request for a selected offered service has the hardware or software capability to perform the requested action, the device accepts a request for service from the requesting device (step 810). Only then does the device receiving the request test its own resources and capabilities currently available to determine whether the device can perform the requested service. If it does not support the requested service, a denial of availability is sent to the requester.

The present claimed invention, however, makes it impossible for this situation to occur. Using the present invention, a requesting device cannot even request a service that is not available since the tests for compatibility are performed before a hosting device advertises its services, i.e. services that are ordinarily available for requesting but which are currently unavailable will not even be advertised to the requesting device.

The addition of Wehmeyer provides no such teaching or suggestion. Wehmeyer teaches automatic detection of phone system settings for dial-up modem connections. This system utilizes a circuit for detecting whether a phone line is present. However, as noted above, the presence of

an active phone line is not recorded in a service advertisement. Applicant acknowledges the existence of telephone line detection circuits, and does not claim a telephone line detection circuit as its invention. Rather, Applicant claims, in a communication system involving at least two discrete communication devices, a system whereby a device having modem services potentially available does not "advertise" their availability unless the modem contained in this device is connectable to a functioning telephone line. Wehmeyer provides no teaching of testing a modem for a phone line connection prior to advertising services to a requesting device, nor does Wehmeyer provide any motivation for combining a circuit that detects a functioning phone line with the system of Ayyagari to result in a system where a computer tests its modem and phone line connection before responding to a request for services.

Neither Ayyagari nor Wehmeyer teach or suggest a system whereby a device having modem services potentially available does not "advertise" their availability unless the modem contained in this device is connectable to a functioning telephone line. The fact that Wehmeyer may or may not teach whether a proper phone line connection with a modem exists is immaterial. Essentially all devices that work with a modem at some point must determine whether or not a modem is connected to a phone line. However, neither of these cited patents teach nor suggest that prior to issuing a service record identifying modem-based services, determining whether a proper phone line connection exists, so that if no such connection exists, the modem-based service is excluded from the service record.

Likewise, the addition of Williams does not teach or suggest the claimed invention. Williams is concerned with determining the existence of modem devices coupled to a computer system. More specifically, an enumerator 92 is used at start up to detect newly installed devices. See, for example, column 8, line 22 through column 10, line 24. Nowhere in Williams is there a discussion of having a second device make a determination that a proper phone line connection exists before it represents to other communication devices that it has modem services available.

At best, the combination of references suggested by the Examiner would result in a system whereby a user of a first device would receive a service record of the second device indicating that the second device contained one or more services, e.g., modem services, whether or not those services could actually be used. The present invention, on the other hand, will only show as available services that can actually be utilized by the first device. This is a significant advantage to the prior art and is not taught or suggested by any of the cited references, either alone or in combination. Accordingly, all of the claims patentably define over the proposed combination of Ayyagari and Wehmeyer and/or Williams. As each independent claim contains a limitation stating that the service record identifying the services provided is only generated after system determines whether a modem is installed and properly connected to a phone line, the present claimed invention patentably defines over Ayyagari, Wehmeyer and Williams, alone or in any combination. The Examiner is respectfully requested to reconsider and withdraw the rejection of the claims based on these references.

Conclusion

The present invention is not taught or suggested by the prior art. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection of the claims. An early Notice of Allowance is earnestly solicited.

The Commissioner is hereby authorized to charge any fees associated with this communication to Deposit Account No. 19-5425.

Respectfully submitted,

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Date


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